

Costing Lesson Plan

Unit: Controlling Food Costs

Lesson/ Project: Costing Apple Turnovers

Duration: 2.5 days

Objective: Students will be able to

- Determine food costs
- Determine food cost percentages
- Establish standard portion costs
- Explain the difference between as-purchased versus edible-portion costs
- Control portion sizes
- Determine menu pricing

Motivation: To prepare the students for menu/restaurant creation and be ready to compete in the state culinary competitions management section.

CTE State Standards:

Math

(1.2) Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers.

(1.6) Calculate the percentage of increases and decreases of a quantity.

(13.0) Students add, subtract, multiply, and divide rational expressions and functions. Students solve both computationally and conceptually challenging problems by using these techniques.

Communications

(2.5) Use appropriate vocabulary and the specialized terminology of the industry.

Problem solving and critical thinking

(5.2) Understand the systematic problem-solving models that incorporate input, process, outcome, and feedback components.

Food Service and Hospitality Pathway

(B 7.3) Know the principle of *mise en place*, including the placement and order of use of the ingredients, tools, and supplies needed to produce baked goods, pastries, and desserts.

(B 7.4) Produce baked goods, pastries, and desserts by using correct techniques, procedures, and various finishing techniques.

(B 11.4) Calculate recipe costs and pricing per portion and compare the cost per cover to the theoretical cost.

Materials Needed: Worksheets, apple turnover recipe, calculators, ingredients and kitchen tools, lecture and guidance.

I. Introduction:

Day 1: Demonstrate recipe, explain techniques in cutting, weighing, measuring, and puff pastry use.

Day 2:

Food For Thought #10

What is the difference between these two items on an ingredient list?

a) 24 ounces apples, peeled, cored and sliced

b) 24 ounces peeled, cored and sliced apples

II. Presentation and activity: Short lecture/demonstration on yield rate (15 minutes). Costing/ Yield Rate worksheet. *Mise en place* and cooking apple turnovers (40 minutes).

III. Application: Remaining time – The students work together to break down a recipe to its unit price and how to find the cost of the units. They will then be shown how to convert the unit price into a cost to manufacture and then a menu price. Continue day 3.

Day 3 – review cost and price point. Sell product during break or lunch. Check for profit.

IV. Evaluation: Final project – the students will create their own menus with recipes to break down and cost out. They will be graded on their accuracy and work shown.

Costing/Yield RateName Per Date **How much do you need to buy of a product that has waste?**(a) Use the yield rate formula $Y\%(EP) = AP$ **Y% = Yield percentage****EP = Edible portion****AP = As purchased****How much will it cost, figuring in the inedible portion?**

(b) Find the AP unit cost (AP cost per ounce). Divide the AP purchase price by the number of ounces.

(c) Find the EP purchase price. Divide the AP purchase price by the Y%.

(d) Find the EP unit cost (EP cost per ounce). Divide the EP purchase price by the number of ounces.

(e) Find the total cost for your recipe. Multiply the EP amount by the EP unit cost.

For the apples:

(f) Find the Y%. Divide the EP amount by the AP amount.

****You will also have to convert the purchase price unit from pounds to ounces.**

Item		Amount	Purchase Price	Unit Cost	Total Cost
Orange Juice	EP	5.25 oz.	(c) \$2.37 / 16 oz.	(d) .149/oz.	(e) \$.78
Y% 37.6	AP	(a)13.963	\$.89 / 16 oz.	(b) .056/oz.	

Item		Amount	Purchase Price	Unit Cost	Total Cost
Serrano Chili	EP	.35 oz.	(c) \$2.30 / 16oz.	(d) \$.144 / oz.	(e) \$.05
Y% 81.3	AP	(a).43 oz	\$1.87 / 16 oz.	(b) \$.117 / oz.	

Item		Amount	Purchase Price	Unit Cost	Total Cost
Apples	EP	24 oz.	(c)\$49.412/ 640 oz.	(d) \$.077 / oz.	(e) \$1.85
(f) Y% 85	AP	(a)28.235oz	** \$42 / 40 lb.	(b) \$.066 / oz.	

(Homework)

Item		Amount	Purchase Price	Unit Cost	Total Cost
Broccolini	EP	6.75 oz.	(c)\$4.28 / 8 oz.	(d) \$.535 / oz.	(e) \$3.61
Y% 62.8	AP	(a)10.748oz	\$2.69 / 8 oz.	(b) \$.336 / oz.	